

IOWA FALLS COAL GAS SITE

(Iowa Falls, Iowa)

GENERAL DESCRIPTION

The Iowa Falls Coal Gas Site occupies 0.35 acre in the SE 1/4 of the NW 1/4 of Section 18, T89N, R20W, Hardin County, Iowa Falls, Iowa. The property is owned by IES Utilities (formerly Iowa Electric Light and Power Company). The site was entered on the Registry in May 1990.

SITE CLASSIFICATION

The site is classified "b" in accordance with 455B.427.3. Hazardous substances have been disposed of at the site, posing a significant threat to the environment.

TYPE AND QUANTITY OF HAZRADOUS WASTE

A coal gasification plant was operated at the site from 1909 to 1949. During its operation, coal tar, iron oxide waste, and associated coal gasification wastes were generated at the plant. Unknown quantities of these wastes have been disposed of at the site. During December 1986 constituents of coal tar waste were found in a storm sewer and in an unnamed creek south of the site. An analysis of the waste sludge identified twelve polynuclear aromatic hydrocarbons (PAHs) for a combined total concentration of PAHs of 106,690 ug/l. A groundwater investigation was conducted during October 1988. Analytical results of on-site monitoring wells showed a total PAH concentration of 3,061 ug/l, benzene at 1,200 ug/l, xylenes at 1,300 ug/l, ethylbenzene at 1,600 ug/l, arsenic at 28 ug/l, and total cyanide at 490 ug/l.

SUMMARY OF PUBLIC HEALTH AND ENVIRONMENTAL CONCERNS

The site is located within the city limits of Iowa Falls, Iowa. The city obtains its water from six municipal wells located northwest of the site. The nearest city well is located approximately 3,000 feet from the site.

Surface drainage from the site is from the north to the south, with discharge into a small unnamed creek just south of the site. This unnamed creek begins at a storm sewer that crosses beneath the site. The creek flows south approximately 1,000 feet and discharges into the Iowa River. The Iowa River flows west to east through Iowa Falls. Local fishermen have reported that fish taken in the Iowa River below the site's storm sewer outfall have a creosote taste and odor.

SUMMARY OF ASSESSMENT, MONITORING OR REMEDIAL ACTIONS

The state is the lead agency at the site. A Feasibility Study (FS) was submitted to the department that outlined the completed and planned activities for the site.

Coal tar waste has been excavated and removed from the tar separator, septic tank, and storm sewer. Contaminated sediment has been removed from the creek bed on the south side of the site. The remedial action plan for contaminated soil removal and groundwater treatment was submitted to the department in 1994.

Other activities included the excavation of shallow contaminated soil and the placement of a cap over the site to reduce surface water infiltration. Off-site groundwater monitoring and periodic surface water sampling are being conducted. There will also be periodic inspections and repairs, if required, to the storm sewer.

2007: An evaluation of the practicability of recovering dense non-aqueous phase liquids from the subsurface is currently being completed. After completion of this evaluation and any subsequent actions, it is expected that ground water monitoring in support of site closure will begin. The department will continue to work closely with the owner to ensure proper monitoring and cleanup of the site.

LEGEND

● SP-2 SOIL PROBE

--- EXISTING STRUCTURE

--- FORMER STRUCTURE

x FENCE

o RAILING

--- ALLIANT ENERGY PROPERTY BOUNDARY

NOTE

1. CONCENTRATIONS ARE IN mg/kg.

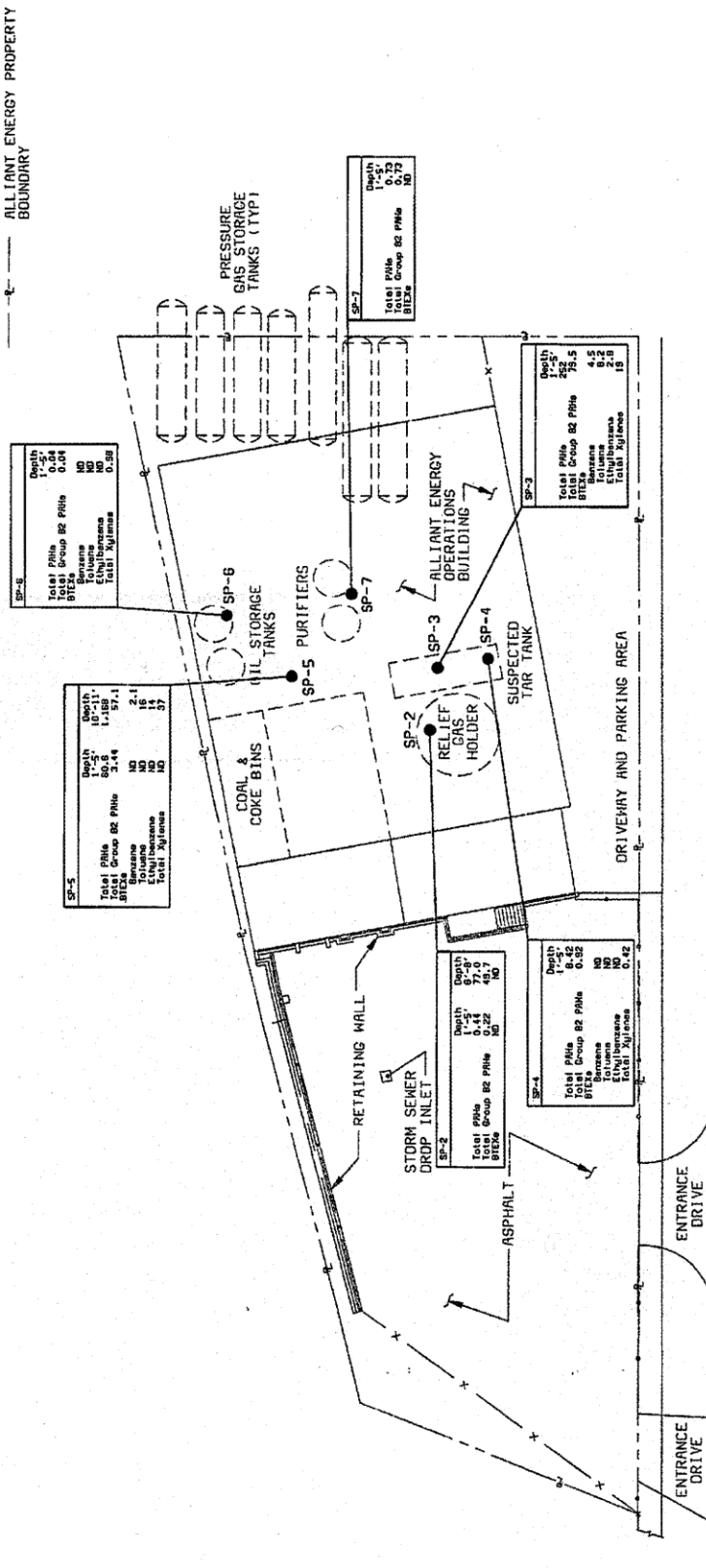


FIGURE 4-1

BTX AND PAH

CONCENTRATIONS IN SOIL

IONA FALLS MGP SITE

ADDENDUM NO. 1 TO R1 REPORT

4582-1000-CEMP-10000231

30' 20' 10' 0' 30' 60'

1"=30'